## CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1-46. **(CANCELLED)**

47. **(NEW)** A system for use with an exhaustible power source and an energy consuming light generating load, said system comprising:

(a) a microchip having at least a first input, said first input transfers information to said microchip when a switch connected to said first input has been activated or deactivated, and when in use with said power source and said load, said input and said switch do not form a serial link in a circuit that conducts energy from the power source to activate the light generating load and wherein said switch is a user interface;

(b) said microchip being configured to control the activation and deactivation of the energy flow from said power source to said light generating load in response to at least a signal received through said first input;

(c) said microchip also configured to control the selection of one of a plurality of operating modes, including at least the adjustment in the power supplied to the load, in response to at least a signal received through said first input such that at least two levels of illumination can be activated; and

(d) said microchip further configured to control at least one function selected from the group consisting of:

(i) a low energy consuming find-in-the-dark location indicator that is active when the load is not activated by the user and when the power source is not being charged, said indicator also gives an indication of the said switch operations;

(ii) a power source level indicator that is not dependent on user selection and/or light generating load activation, and is active when the power source is not being charged; and

(iii) a gradual adjustment of power to the load, such that the gradual change in power is not easily visible to the human eye, and wherein the adjusted power level is based on operator actions.

48. **(NEW)** The system of claim 47, comprising a single switch connected to a single input of said microchip, wherein said switch is the only interface switch.

49. **(NEW)** The system of claim 47, wherein the microchip controls at least two functions selected from the group in (d).

50. **(NEW)** The system of claim 49, comprising a single switch connected to a single input of said microchip, wherein said switch is the only user activation and deactivation interface switch.

51. **(NEW)** The system of claim 47, wherein a further function controlled by the microchip comprises at least one function selected from the group consisting of a find–in-the-dark indicator also giving an indication of the remaining power in the power source, providing a gradual increasing power adjustment function when switched on and providing a gradual power reduction function when switched off.

52. **(NEW)** The system of claim 48, wherein a further function controlled by the microchip comprises at least one function selected from the group consisting of a find-in-the–dark-indicator also giving an indication of the remaining power in the power source, providing a gradual increasing power adjustment function when switched on and providing a gradual power reduction function when switched off.

53. **(NEW)** The system of claim 47 wherein the microchip is further configured to recognize the selection by the user of specifically the deactivation of the load or off function, by the time duration of switch activation, the time duration of switch de-activation, and the number of activation signals received through said first input.

54. **(NEW)** The system of claim 50 wherein the microchip is further configured to recognize the selection by the user of specifically the deactivation of the load or off function, by the time duration of the switch deactivation, and the number of activation signals received through said first input.

55. **(NEW)** The system of claim 48 wherein the microchip is configured to control a flashing function on said load in response to the time period of an activation of the switch being longer than a predefined period.

56. **(NEW)** The system of claim 47 wherein said microchip is always powered when a power source is connected in the system.

57. **(NEW)** The system of claim 49 wherein a further function controlled by the microchip comprises at least one function selected from the group consisting of a find in the dark indicator also giving an indication of the remaining power in the power source, providing a gradual increasing power adjustment function when switched on, providing a gradual power reduction function when switched off and an automatic delayed shut-off function in response to an activation signal received through said input.

58. **(NEW)** The system of claim 57 wherein the microchip recognizes the selection by the user of specifically the switch off function by the time duration of the switch being activated, the time duration of switch being deactivated, and the number of activation signals, received through said first input.

59. **(NEW)** A system for use with an exhaustible power source and an energy consuming light generating load, said system comprising:

(a) a microchip having at least a first input, said first input transfers information to said microchip when an switch connected to said first input has been activated or deactivated, and when in use with said power source and said load, said input and said switch do not form a serial link in the circuit that conducts energy from the power source to energize the light generating load and said at least one switch being a user interface;

(b) said microchip configured to control the activation and deactivation of the energy flow from said power source to said light generating load in response to at least a signal received through said first input;

(c) said microchip also configured to control the selection of one of a plurality of operating modes, including at least the adjustment in the power supplied to the light generating load to provide a different level of illumination, in response to at least a signal received through said first input; and

(d) said microchip further configured to control at least an automatic delayed shut off function in response to an activation signal received through said first input.

60. **(NEW)** The system of claim 59 wherein the switch is the only user interface switch.

61. **(NEW)** A system for use with an exhaustible power source and an energy consuming light generating load, said system comprising:

(a) a microchip having at least a first input, said first input transfers information to said microchip when an switch connected to said first input has been activated or deactivated, and when in use with said power source and said load, said input and said switch do not form a serial link in the circuit that conducts energy from the power source to energize the load;

(b) said microchip configured to control the activation and deactivation of the energy flow from said power source to said light generating load in response to at least a signal received through said first input;

(c) said microchip also configured to control the selection of one of a plurality of operating modes, including at least the adjustment in the power supplied to the light generating load to achieve an adjusted illumination level, in response to at least a signal received through said first input; and

(d) said microchip further configured to control at least a find-in-the-dark location indicator that is active when the light generating load is not activated by the user and when the power source is not being charged, said indicator also gives an indication of the said switch operations;

62. **(NEW)** A system for use with an exhaustible power and an energy consuming light generating load, said system comprising:

(a) a microchip having at least a first input, said first input transfers information to said microchip when an switch connected to said first input has been activated or deactivated, and when in use with said power source and said light generating load, said input and said switch do not form a serial link in the circuit that conducts energy from the power source to energize the light generating load;

(b) said microchip configured to control the activation and deactivation of the energy flow from said power source to said light generating load in response to at least a signal received through said first input;

(c) said microchip also configured to control the selection of one of a plurality of operating modes, including at least the adjustment in the power supplied to the light generating load to achieve an adjusted illumination level, in response to at least a signal received through said first input; and

(d) said microchip further configured to control at least said microchip further configured to control at least a power source level indicator that (i) is active when the light generating load is not activated, and/or (ii) is not dependent on user selection, and (iii) is active when the power source is not being charged.

63. **(NEW)** A system for use with an exhaustible power source and an energy consuming light generating load, said system comprising:

(a) a microchip having at least a first input, said first input transfers information to said microchip when a switch connected to said first input has been activated or deactivated, and when in use with said power source and said load, said input and said switch do not form a serial link in the circuit that conducts energy from the power source to energize the light generating load;

(b) said microchip configured to control the activation and deactivation of the energy flow from said power source to said light generating load in response to at least a signal received through said first input;

(c) said microchip also configured to control the selection of one of a plurality of operating modes, including at least the adjustment in the power supplied to the light generating load to achieve an adjusted illumination level, in response to at least a signal received through said first input; and

(d) said microchip further configured to control at least a gradual adjustment of power to the load, such that the gradual change in power is not easily visible to the human eye, and wherein the adjusted power level is based on the time of switch closed and/or open operations.

64. **(NEW)** A system for use with an exhaustible power source and an energy consuming light generating load, said system comprising:

(a) a microchip having at least a first input, said first input transfers information to said microchip when a switch connected to said first input has been activated or deactivated, and when in use with said power source and said load, said input and said switch do not form a serial link in the circuit that transfers the energy between the power source and the load;

(b) said microchip configured to control the activation and deactivation of the energy flow from said power source to said light generating load in response to at least a signal received through said first input;

(c) said microchip also configured to control the selection of one of a plurality of operating modes, including at least the adjustment in the power supplied to the light generating load to achieve an adjusted illumination level, in response to at least a signal received through said first input; and

(d) said microchip further configured to control the selection of a specific function by a user being dependent on the time duration of the switch being activated, the time duration of the switch being deactivated, and the number of activation signals received from the switch through said first input.

65. **(NEW)** The system of claim 64 wherein the microchip controls an adjustment in power supplied to the light generating load through an intermittent power sequence such that any period wherein the power source is not connected to the light source, does not create an easily visible dead period.

66. **(NEW)** The system of claim 59 wherein the microchip is always powered if a good power source is connected in the system.

67. **(NEW)** The system of claim 63 wherein the microchip also controls a delayed shut off function in response to an activation command received through said first input.

68. **(NEW)** The system of claim 65 wherein the microchip also controls a delayed shut off function in response to an activation command received through said first input.

69. **(NEW)** The system of claim 61 wherein the microchip also controls a power source level indicator that is not activated by the user.

70. **(NEW)** The system of claim 63 wherein the microchip also controls a visual find-in-the-dark indicator that is active when the light generating load is not activated by the user.

71. **(NEW)** The system of claim 65 wherein the microchip also controls a visual find-in-the-dark indicator that is not activated by the user.

72. **(NEW)** The system of claim 65 wherein the microchip also controls the indication of the power source level that is not selected by the user.

73. **(NEW)** The system of claim 64 wherein the microchip also controls a gradual adjustment of the power supplied to the light generating load in response to a signal received through said first input such that the gradual change of power is not easily visible to the user.

74. **(NEW)** The system of claim 50 wherein a further function controlled by said microchip is an automatic delayed shut off function.

75. **(NEW)** The system of claim 74 wherein the microchip further controls a find-in-the-dark indicator when the light source is switched off.

76. **(NEW)** The system of claim 47 wherein the off mode is selected upon receiving a signal indicating the deactivation of the switch, if the preceding period of the switch activation was longer than a certain minimum period.

77. **(NEW)** The system of claim 47 wherein the microchip also controls a gradual increase in power to the load when switching "on" and/or a gradual reduction in power to the load when switching "off", such that the gradual change in the power supplied to the light generating load is not easily visible to the user.

78. **(NEW)** The system of claim 50 wherein the system is adapted for use in a flashlight.

79. **(NEW)** The system of claim 67 comprising a casing and wherein the microchip, the light generating load and the switch are each attached to and/or enclosed in the casing.

80. **(NEW)** The system of claim 68 comprising a casing and wherein the microchip, the light generating load and the switch are each attached to and/or enclosed in the casing.

81. **(NEW)** The system of claim 73 comprising a casing and wherein the microchip, the light generating load and the switch are each attached to and/or enclosed in the casing.

82. **(NEW)** The system of claim 48 wherein a further function controlled by said microchip is an automatic delayed shut off function in response to an activation signal received at least through said first input.

83. **(NEW)** The system of claim 63 wherein a further function controlled by said microchip is an automatic delayed shut off function.

84. **(NEW)** The system of claim 47 wherein said system controls all three functions from said group in (d).

85. **(NEW)** The system of claim 47 wherein the system is adapted for use in a portable lighting product and wherein the said microchip is also configured to control the giving of an indication of the remaining power in said power source when the light generating load is deactivated by the user.

86. **(NEW)** The system of claim 84 wherein the system is adapted for use in a portable lighting product and the microchip is further configured to control the giving of an indication of the remaining power in said power source.

87. **(NEW)** The system of claim 47 wherein the microchip is further configured to accept commands that contain at least an address from another controller.

88. **(NEW)** The system of claim 83 further comprising a casing and wherein the said microchip, said switch and said light generating load are each attached to and/or enclosed in the casing.

89. **(NEW)** The system of claim 63 wherein the microchip is further configured to accept commands that contain at least an address from another controller.

90. **(NEW)** The system of claim 83 wherein the microchip is further configured to accept commands that contain at least an address from another controller.

91. **(NEW)** The system of claim 88 wherein the microchip is further configured to accept commands that contain at least an address from another controller.

92. **(NEW)** The system of claim 90 wherein said commands are transferred via a power line to the microchip.

93. **(NEW)** The system of claim 91 wherein said commands are transferred via a power line to the microchip.

94. **(NEW)** The system of claim 47 in a configuration wherein the system further comprises an energy storage device that supplies energy to said microchip when said power switch is conducting, and wherein when said power switch is not conducting, said storage device is recharged from said power source.

95. **(NEW)** The system of claim 49 in a configuration wherein the system further comprises an energy storage device that is required to supply energy to said microchip when said power switch is conducting, and wherein when said power switch is not conducting, said storage device is recharged from said power source.

96. **(NEW)** The system of claim 47 wherein the switch connected to said first input is a touch pad or a touch sensor.

97. **(NEW)** The system of claim 49 wherein the switch connected to said first input is a touch pad or a touch sensor.

98. **(NEW)** The system of claim 59 wherein the switch connected to said first input is a touch pad or a touch sensor.

99. **(NEW)** The system of claim 63 wherein the switch connected to said first input is a touch pad or a touch sensor.

100. **(NEW)** The system of claim 65 wherein the switch connected to said first input is a touch pad or a touch sensor.

101. **(NEW)** The system of claim 67 wherein the switch connected to said first input is a touch pad or a touch sensor.

102. **(NEW)** The system of claim 68 wherein the switch connected to said first input is a touch pad or a touch sensor.

103. **(NEW)** A system for use with an exhaustible power source and an energy consuming load being an electric motor used in for example an electric powered boat, plane, car or other toys, said system comprising:

(a) a microchip having at least a first input, said first input transfers information to said microchip when an switch connected to said first input has been activated or deactivated, and when in use with said power source and said load, said input or said switch do not form a serial link in the circuit that conducts energy from the power source to operate the said electric motor, and said switch being a user interface;

(b) said microchip configured to control the activation and/or deactivation of the said electric motor in response to at least a signal through said first input; and

(c) said microchip further configured to control at least one function selected from the group consisting of:

(i) a low energy consuming find-in-the-dark location indicator that is active when the load is not activated by the user and when the power source is not being charged, said indicator also gives an indication of the said switch operation;

(ii) a power source level indicator that is active when the load is not activated by the user, and is active when the power source is not being charged;

(iii) a gradual adjustment of power to the load, such that the change in power is smooth, and wherein said power adjustment level is based on the actions of the user;

(iv) the supply of power to said electric motor in a code sequence, in response to an activation signal through said first input; and

(v) an adjustment in the power level supplied to said electric motor in response to at least a signal received through said first input as well as an automatic delayed shut off function to deactivate the operation of the electric motor after a predetermined period of operation, in response to an activation signal received through said first input.

104. **(NEW)** The system of claim 103, comprising a one switch connected to one input of said microchip, with said switch being the only user mode selection interface.

105. **(NEW)** The system of claim 103, wherein the microchip controls the adjustment of the power level supplied to said load through an intermittent power delivery sequence from the power source, such that any dead period when the power source is disconnected from the load, is not easily noticed by the user.

106. **(NEW)** The system of claim 103, wherein the microchip controls at least two functions selected from the group in (c).

107. **(NEW)** The system of claim 106, comprising a one switch connected to one input of said microchip and wherein said switch is the only user mode selection interface switch.

108. **(NEW)** The system of claim 107, further comprising a casing and wherein the microchip, the switch, the power source and the electric motor are each attached to and/or enclosed in the casing.

109. **(NEW)** The system of claim 108, wherein the said microchip is further configured to control the recharging of said power source.

110. **(NEW)** The system of claim 103, wherein the system is further configured to comprise an energy storage device that is required to supply energy to said microchip when power is conducted to the electric motor, and wherein when said electric motor is not powered, said storage device is recharged with energy from said power source.

111. **(NEW)** The system of claim 108 wherein the microchip also controls an automatic delayed shut-off function with said first input acting as an activation and deactivation interface.

112. **(NEW)** The system of claim 109 wherein the microchip also controls the indication of said power source level, when the electric motor is deactivated by the user.

113. **(NEW)** The system of claim 107, wherein the said microchip also controls the recharging of said power source.

114. **(NEW)** The system of claim 113, wherein the microchip also controls the visual indication of said power source level, when said power source is not being charged.

115. **(NEW)** The system of claim 106, wherein the microchip also controls the visual indication of said power source level.

116. **(NEW)** The system of claim 103 wherein the microchip is further configured to accept commands from another controller that contains at least an address.

117. **(NEW)** The system of claim 116, wherein the said commands are transferred via a power line to the microchip.

118. **(NEW)** The system of claim 103 wherein the switch connected to said input is a touch pad or a touch sensor.

119. **(NEW)** The system of claim 114, wherein the microchip controls the adjustment of the power level supplied to said load, through an intermittent power delivery sequence from the power source, such that any dead period when the power source is disconnected from the load is not easily noticed by the user.

120. **(NEW)** The system of claims 114 wherein the said microchip further controls an automatic delayed shut-off function with said first input acting as an activation/deactivation interface and said microchip controlling the power to shut off after a predetermined period of time in response to the receipt of an activation signal received through said first input.

121. **(NEW)** The system of claim 104, wherein the said microchip also controls the recharging of said power source and gives an indication of the power level of said power source.

122. **(NEW)** The system of claim 121, wherein the said microchip further controls an automatic delayed shut-off function with said first input acting as an activation and deactivation interface and said microchip controlling the power to shut off after a predetermined period of time in response to the receipt of an activation signal received through said first input.

123. **(NEW)** The system of claim 104, wherein the microchip controls a code sequence of power supplied to the said electric motor.

124. **(NEW)** The system of claim 107, wherein the microchip controls a code sequence of power supplied to the said electric motor.

125. **(NEW)** The system of claim 121, wherein the microchip controls a code sequence of power supplied to the said electric motor.

126. **(NEW)** The system of claim 122, wherein the microchip controls a code sequence of power supplied to the said electric motor.

127. **(NEW)** The system of claim 103, wherein the electric motor is adapted for use in an electric powered boat.

128. **(NEW)** The system of claim 103, wherein the electric motor is adapted for use in an electric powered plane.

129. **(NEW)** The system of claim 103, wherein the electric motor is adapted for use in an electric powered car.

130. **(NEW)** The system of claim 103, wherein the electric motor is adapted for use in an electric powered toy.

131. **(NEW)** The system of claim 103, further comprising a casing wherein the microchip and the switch are attached to and/or enclosed in the casing, said casing adapted for receipt of an exhaustible power source.

132. **(NEW)** A switching system for use with an exhaustible power source and an energy consuming load being an electric motor used in for example an electric powered boat, plane or car, said system comprising:

(a) a microchip having at least a first input, said first input transfers information to said microchip when an switch connected to said first input is activated or deactivated, and when in use with said power source and said load, said input and said switch do not form a serial link in the circuit that conducts energy from the power source to operate the electric motor and said switch being a push button switch;

(b) said microchip configured to control the activation and the deactivation of the energy flow from said power source to said electric motor in response to at least a signal through said first input;

(c) said microchip further configured to control the following functions:

- an adjustment of power supplied to said electric motor through an intermittent disconnection of the power source from said electric motor, such that the operation is still smooth;

- an adjustment of power supplied to said electric motor in response to a signal received through said first input;
- the supply of power to said electric motor in the form of a code sequence.

133. **(NEW)** The switching system of claim 131, wherein the microchip monitors said power source level and gives a visual indication thereof to the user by controlling an indicator.

134. **(NEW)** The switching system of claim 132, wherein the microchip also controls the recharging of said power source.

135. **(NEW)** The switching system of claim 132, wherein the said microchip also controls an automatic delayed shut off function in response to an activation signal received through said first input.

136. **(NEW)** The switching system of claim 134, wherein the said microchip also controls an automatic delayed shut off function in response to an activation signal received through said first input.

137. **(NEW)** The switching system of claim 134, further comprising a casing and wherein the microchip, the power source and the switch each are attached to and/or enclosed in the casing.

138. **(NEW)** The switching system of claim 136, further comprising a casing and wherein the microchip, the power source and the switch each are attached to and/or enclosed in the casing.

139. **(NEW)** The switching system of claim 134, wherein the microchip monitors said power source level and gives a visual indication thereof to the user by controlling an indicator.

140. **(NEW)** The switching system of claims 132, wherein the microchip is configured to control a visual indicator that gives an indication of switch operation.

141. **(NEW)** The switching system of claim 132 wherein the electric motor is adapted for use in an electric powered boat.

142. **(NEW)** The switching system of claim 132 wherein the electric motor is adapted for use in an electric powered plane.

143. **(NEW)** The switching system of claim 132 wherein the electric motor is adapted for use in an electric powered car.

144. **(NEW)** The switching system of claim 132, further comprising a casing wherein the microchip and the switch are attached to or enclosed in the casing, said casing adapted for receipt of an exhaustible power source.